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**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Application Number: 10/736,282
Filing Date: December 15, 2003
Appellant(s): NAKAHATA ET AL.

John G. Powell
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed April 29, 2010 appealing from the Office
action mailed November 17, 2009.

(1) Real Party in Interest

A statement identifying by name the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The statement of the status of claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is incorrect.

The amendment after final rejection filed on January 15, 2010 has not been entered.

(5) Summary of Claimed Subject Matter

The summary of claimed subject matter contained in the brief is correct.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN

REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(7) Claims Appendix

The copy of the appealed claims contained in the Appendix to the brief is correct.

(8) Evidence Relied Upon

5873868	NAKAHATA	02-1999
6049915	MALOWANIEC	4-2000

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 2 and 4-18 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for an extensibility controlling means, does not reasonably provide enablement for a specific structure or material that inhibits the chassis layer from extending beyond 20% at a tension force of 125 grams/25mm. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. Appellant

discloses only large classes of materials for the topsheet when it functions as the extensibility control means and elastic and inelastic materials for the means when it is not necessarily the topsheet, as in the case of claim 1, rendering the breadth of the claim overly broad. Further, the type of material the control means is made of and the structural relationship of the extensibility control means with the rest of the components of the article are both simultaneously responsible for the degree of extension and inhibition of the chassis layer. No working examples are disclosed. As such, the amount of direction provided by the inventor is not sufficient for one of ordinary skill in the art to replicate this inhibition of the chassis layer without undue experimentation with regard to materials and the nature of the control means, e.g. whether it is an elastic waist band or a topsheet or other material attached to the chassis layer.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Appellant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 2, 4, 5 and 7-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakahata (U.S. Patent No. 5,873,868) in view of Malowaniec (U.S. Patent No. 6,049,915).

With respect to **claim 1**: The examiner is not invoking 35 U.S.C. 112, sixth paragraph in the interpretation of claim because the phrase "extensibility controlling means" lacks corresponding function language to meet the requirement of a means-plus-function limitation. Nakahata discloses an absorbent article 200 having a pair of longitudinal side edges 50 and a first end edge 52, a second end edge 52, a first waist panel defining first waist region 46 adjacent to the first end edge 52, a second waist panel defining second waist region 44 adjacent to the second end edge 52, a crotch panel defining crotch region 48 positioned between the first and second waist panels, and a side panel 30 extending laterally outwardly from the first or second waist panel. (Figs. 1,2, Col. 3, lines 15-31, Col. 11, lines 1-5) The absorbent article 200 comprises a liquid pervious topsheet 202, an absorbent core 28 disposed underneath the topsheet 202, and a chassis layer in the form of backsheet 26, wherein the first or second waist panel comprises a portion of the chassis layer inasmuch as the first and second waist panels are part of the main structure of the diaper and the chassis layer comprises the main structure of the diaper. (Col. 3, lines 32-36, 45-47) At least one of the first and second waist panels comprises a portion of the chassis layer inasmuch as both waist panels are defined in part by the backsheet 26. The chassis layer includes an inner sheet and an outer sheet joined together to form a laminate inasmuch as Nakahata discloses that backsheet 26 is made from composite materials. ('868, Col. 4, lines 16-18) The topsheet 202 includes a plurality of spaced discontinuities in the form of a pattern 204 of slits 206 regularly disposed in at least a portion of the first or second waist panel such that when the waist panel is subject to tension the discontinuities provide openings 212 that extend through the topsheet 202, thereby providing the topsheet, which is a chassis

layer, with extensibility in the transverse direction. (Fig. 3, Col. 11, lines 5-8, 30-37) Nakahata discloses an extensibility controlling means in the form of elastic waist feature 34 comprising an elastic waist band configured to control the extensibility of the chassis layer inasmuch as elastic feature 34 is attached to the chassis layer (i.e. the elastic feature forms a portion of the end edge 52) and contracts to fit the user's waist, causing the chassis layer to follow the motion of elastic feature when the elastic feature contracts. Further, the waist band disclosed by Nakahata is an elastic band, which is identical to a material disclosed by appellant for the recited waist band feature. (Col. 7, lines 60-66, Col. 8, lines 2-5) The extensibility controlling means 34 of Nakahata is an elastic material wherein the extensibility controlling means inhibits the chassis layer from extending beyond extensibility causing breakage of the chassis layer via its ability to contract when an elongating force is removed, e.g. when the controlling means 34 contracts to fit the user's waist.

Nakahata teaches that the discontinuities 206 are present in topsheet 24, which is a chassis layer, but does not teach that the discontinuities are present in a separate chassis layer 22 from the topsheet as claimed. Malowanec teaches an absorbent article having an absorbent core in the form of elastic layer 11 disposed between topsheet 13, and a chassis layer 12. Both chassis layer 12 and topsheet 13 include a plurality of spaced discontinuities 14 regularly disposed in at least a portion of the first or second waist panel (inasmuch as the incisions occur throughout the entire layer 12) such that when the waist panel is subject to tension the discontinuities 14 provide openings that extend through the chassis layer 12. Since Malowanec teaches that both topsheet 13 and chassis layer 12 have discontinuities that lend extensibility to the otherwise inelastic material of topsheet 13 and chassis layer 12, and extensibility provides a more comfortable fit to the wearer during use, it would be obvious to one of ordinary skill in the art to modify the article of Nakahata so as to have discontinuities located in the chassis layer

instead of or in addition to the topsheet as taught by Malowanec to provide extensibility to the chassis layer to allow a more comfortable fit to the wearer. ('915, whole document)

With regard to the limitation "wherein the extensibility controlling means inhibits the chassis layer from extending beyond 20% at a tension force of 125g/25mm", Nakahata teaches many materials for topsheet 24 that are identical to materials disclosed by appellant for a topsheet that functions as an extensibility control means. Further, the article of Nakahata as modified by Malowanec meets all of the structural limitations of claim 1, wherein appellant discloses that materials and structural configuration of the chassis layer relative to the rest of the diaper inhibit the chassis layer from extending beyond 20% elongation. Thus, while Nakahata is silent regarding a percentage elongation of the topsheet associated with a tension force of 125 grams/25mm, it would be obvious to one of ordinary skill in the art to modify the article of Nakahata as modified by Malowanec such that the extensibility controlling means inhibits the chassis layer from extending beyond 20% at a tension force of 125 g/25 mm with a reasonable expectation of success to prevent breakage of the chassis layer that would impair or destroy the function of the diaper. The article of Nakahata as modified by Malowanec thus meets the limitation "the discontinuities provide openings that extend through the laminate of the chassis layer, thereby providing the chassis layer with extensibility in the transverse direction".

With respect to **claim 2**: The extensibility causing breakage of the chassis layer 26 disclosed by Nakahata is between 10-500%, which overlaps the range of more than 20 %. (Col. 13, lines 10-12)

With respect to **claim 4**: The extensibility controlling means 34 disclosed by Nakahata is disposed in the first or second waist panel 46,44 in the transverse direction across at least the

transverse width of the plurality of spaced discontinuities 206. (Fig. 2, Col. 7, line 65 – Col. 8, line 9, Col. 11, lines 1-8)

With respect to **claim 5**: The extensibility controlling means (waist feature 34) disclosed by Nakahata is present along, and thus disposed along, the end edge 52. (Col. 7, lines 59-66)

With respect to **claim 7**: The chassis layer 22 disclosed by Nakahata comprises a liquid impervious material. (Col. 3, lines 32-35, Col. 4, lines 5-12)

With respect to **claim 8**: The absorbent article 20 disclosed by Nakahata comprises a liquid impervious sheet 26 disposed between the absorbent core and the chassis layer where the chassis layer is a holder and the diaper comprises a holder and liner wherein the liner contains the topsheet 24, backsheet 26 and core 28. (Col. 3, lines 39-43)

With respect to **claims 9,10**: Nakahata teaches that the core can be of various shapes and sizes. (Col. 7, lines 5-12) Thus while Nakahata does not explicitly teach that the absorbent core 28 does not extend into the first or second waist panel in which the discontinuities 206 are provided, it would be obvious to one of ordinary skill in the art to modify the article of Nakahata to meet this limitation, as the core is substantially inelastic and would inhibit the elasticity of the topsheet 24 and may interfere with the function of extensibility controlling means 26, which is contrary to one of the problems sought to be solved by Nakahata, i.e. to provide an elastically extensible topsheet 24.

With respect to **claim 11**: The discontinuities 206 disclosed by Nakahata are slits. (Col. 11, lines 5-9)

With respect to **claim 12**: The discontinuities 206 disclosed by Nakahata comprise a plurality of cuts wherein the cuts comprise rectilinear cuts. (Col. 11, lines 5-9)

With respect to **claim 13**: The discontinuities 206 disclosed by Nakahata are regularly disposed as a pattern 204 in the chassis layer 22. (Col. 11, lines 1-9)

With respect to **claim 14**: The discontinuities 206 disclosed by Nakahata are oriented such that the discontinuities extend in a longitudinal direction. (Fig. 2, Col. 11, lines 9-13)

With respect to **claim 15**: The discontinuities 206 disclosed by Nakahata are aligned in the longitudinal direction in an array of columns and rows seen in Fig. 2 such that the discontinuities form a plurality of laterally spaced columns 208 as seen in Fig. 4 which extend in the longitudinal direction. (Col. 11, lines 16-21)

With respect to **claim 16**: The discontinuities 206 disclosed by Nakahata are located in the topsheet 24 which is treated to be hydrophobic and thus the discontinuities 206 comprise a plurality of edges wherein the edges are treated. (Col. 6, lines 9-12) The limitation "to strengthen the edges" constitutes functional language that is given little patentable weight herein. The combined teaching of Nakahata and Malowanec meets all of the structural limitations of claim 16 and claim 1 from which it depends regarding the material of the chassis layer and the discontinuities, and the manner of the claimed treatment, therefore the edges of the

discontinuities of the combined teaching of Nakahata and Malowanec are necessarily treated in such a manner as to strengthen the edges of the instant discontinuities.

With respect to **claims 17,18**: The discontinuities 206 disclosed by Nakahata are arranged such that the application of a tensile force to the chassis layer results in a plurality of equal area openings having an area from about 1 mm² to about 2500 mm². (Col. 12, lines 16-22)

(10) Response to Argument

Appellant's arguments filed April 29, 2010 have been fully considered but they are not persuasive. With respect to arguments regarding the rejection of claims 1, 2, 4, 5 and 7-18: Appellant argues that the examiner has not properly applied the Wands factors for the enablement rejection because factors, reasons and evidence were not discussed or provided, it is the examiner's position that the grounds for rejection were clearly stated. The extensibility controlling means is disclosed by the appellant as comprising either elastic or inelastic materials, which covers every material manufactured by man, and can have several different structural associations with the article, i.e. it can be integral to one or more components of the article, or it can comprise a separate material attached to components of the article. These two facts combine to produce a manufacturing environment in which, though one of ordinary skill in the art may be sufficiently skilled to choose one material having an elongation that meets the claims, undue experimentation would be required to arrive at the precise combination of materials and structural relationships for the extensibility control means that would produce the recited elongation. The rejection under 35 U.S.C. 112 is rewritten slightly herein so as not to make any substantive changes but to rephrase the rejection to make it clear that the Wands factors have been addressed.

With respect to arguments regarding the rejection of claims 1, 2, 4, 5 and 7-18 under 35 U.S.C. 103: The appellant argues that the inherency argument made by the examiner is without merit. The examiner directs the appellant's and Board's attention to the rejection in which it is clear that no inherency argument was ever asserted and in fact cannot be asserted in a rejection under 35 U.S.C. 103 in which two or more references are necessary to make the rejection. The rejection actually states that Nakahata discloses a waist elastic feature that is structurally similar to that disclosed by the appellant and also contains elastic material, also disclosed by the appellant. The examiner's position is that if the appellant can and does broadly disclose that any elastic or inelastic material, alone or attached to another elastic or inelastic material, can yield the recited extension at the recited tension force, then the elastic material of Nakahata can reasonably be expected to also have an extension force within the claimed range, rendering the limitation regarding extension unpatentable. The examiner acknowledges that it is highly unlikely that any elastic or inelastic material will always have an extension force within the claimed range, but is interpreting the claims in light of the specification, i.e. if the appellant discloses that elastic or inelastic materials (or both) as genres of materials exhibit extensions meeting the claims, then by disclosing an elastic material that is fully functional as an extensibility controlling means, Nakahata renders claim 1 unpatentable.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Melanie J Hand/

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